03040205-180

(Black River)

General Description

Watershed 03040205-180 is located in Georgetown County and consists primarily of the ***Black River*** and its tributaries from Black Mingo Creek to its confluence with the Pee Dee River. The watershed occupies 86,488 acres of the Lower Coastal Plain and Coastal Zone regions of South Carolina. The predominant soil types consist of an association of the Yemassee-Yauhannah-Levy-Bladen-Wahee series. The erodibility of the soil (K) averages 0.20; the slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 74.2% forested land, 13.6% forested wetland (swamp), 4.9% scrub/shrub land, 2.8% water, 2.5% nonforested wetland (marsh), and 2.0% agricultural land.

This section of the Black River accepts drainage from its upstream reaches, together with Mill Grove Creek, Lanes Creek, Choppee Creek (Stony Run Creek, Machine Bay), Boheck Creek, and Post Foot Branch. Carvers Bay drains into Big Branch (Millpond Branch), then flows into Carvers Bay Creek, which merges with Fardick Creek to form Peters Creek (Simmons Creek, Guinea Creek, Black Swamp) and drains into the river downstream of Post Foot Branch. Sixmile Creek (Gapway Bay, Greens Creek, Prince Creek, Crooked Branch, Inland Branch) enters the river next followed by Cottage Creek and Longwater Bay. There are several ponds (totaling 132.1 acres) in this watershed, and a total of 110.3 stream miles and 763.3 acres of estuarine areas. The Black River upstream of the crossing of U.S. Hwy. 701 (just upstream of Sixmile Creek) is classified FW* (Dissolved Oxygen not less than 4.0 mg/l and pH between 5.0 and 8.5) and its tributaries are classified FW. Downstream of the crossing, the Black River and its tributaries are classified SA. The Black River Watershed drains into the Pee Dee River.

Water Quality

Station #	Type	Class		Description
PD-325		P	SA	BLACK RIVER AT S-22-489 4 MILES NE GEORGETOWN

Black River (PD-325) - Aquatic life uses are fully supported; however, there was a very high concentration of zinc measured in 1995. This is a tidally influenced system, characterized by naturally low pH and dissolved oxygen concentrations. Although pH and dissolved oxygen excursions occurred, they were typical of values seen in tidally influenced systems with significant marsh and swamp drainage and were considered natural, not standards violations. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are fully supported.

A fish consumption advisory has been issued by the Department for mercury and includes the Black River within this watershed (see advisory p.73).

NPDES Program

Active NPDES Facilities

RECEIVING STREAM / ***FACILITY NAME*** / ***PERMITTED FLOW @ PIPE (MGD)*** / ***COMMENT***	***NPDES#*** / ***TYPE*** / ***LIMITATION***
BLACK RIVER GCW&SD/WEDGEFIELD PLANTATION PIPE #: 001 FLOW: 0.4 WQL FOR DO	SC0029505 MINOR DOMESTIC WATER QUALITY
LANES CREEK GCSD/BROWNS FERRY SCHOOL PIPE #: 001 FLOW: 0.0028 WQL FOR DO,TRC,NH3N,BOD5	SC0039781 MINOR DOMESTIC WATER QUALITY
CHOPPEE CREEK GCSD/CHOPPEE SCHOOL PIPE #: 001 FLOW: 0.01	SC0033081 MINOR DOMESTIC EFFLUENT

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME / ***FACILITY TYPE***	***PERMIT #*** / ***STATUS***
GEORGETOWN COUNTY LANDFILL MUNICIPAL	DWP-059 CLOSED
GEORGETOWN SUBTITLE D LANDFILL --------	221001-1102 OPEN
GEORGETOWN COUNTY LANDFILL MUNICIPAL	221001-1101 CLOSED
GEORGETOWN SUBTITLE D LANDFILL INDUSTRIAL	IWP-231 ---------
GEORGETOWN COUNTY C/C LANDFILL CONSTRUCTION	221001-1201 (CWP-027) ---------
GEORGETOWN COUNTY C&D LANDFILL CONSTRUCTION	221001-1202 --------

Mining Activities

MINING COMPANY / ***MINE NAME***	***PERMIT #*** / ***MINERAL***
GROUND IMPROVEMENT TECHNIQUES GEORGETOWN COUNTY LANDFILL SAND/CLAY MINE	1093-43 SAND/CLAY
SARA SMITH CAHALAN MANSFIELD	1061-43 SAND/CLAY
WILLIAM T. SHADER	1095-43

Water Supply

Portions of this watershed fall within the Waccamaw Capacity Use Area and large groundwater uses must be reported (see Capacity Use Program p.23).

Growth Potential

There is a low potential for growth in this watershed. Water is available along most roads in the area, but there is no sewerage infrastructure. Transportation studies are being completed analyzing the possibility of using S.C. Hwy. 701 as an alternate route to U.S. Hwy. 17. If this project is approved and completed, the area along S.C. Hwy. 701 will likely see a significant increase in residential and commercial development.